

ABSTRACT OF THE DISCLOSURE

In a dynamically compiling computer system, a system and method for efficiently transferring control from execution of an instruction in a first representation to a second representation of the instruction is disclosed. The system and method include the setting of a tag for entry points of each instruction in a first representation that has been translated to a second representation. The tag is stored in memory in association with each such instruction. When a given instruction in a first representation is to be executed, the tag is examined, and if it indicates that a translated version of the instruction has previously been generated, control is passed to execution of the instruction in the second representation. The second representation can be a different instruction set representation, or an optimized representation in the same instruction set as the original instruction.